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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,167

05/16/2007

Michael Luke Tunmer

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EXAMINER

UNG, LANNY N

ART UNIT

PAPER NUMBER

2191

NOTIFICATION DATE

DELIVERY MODE

01/18/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,167	<b>Applicant(s)</b> TUNMER ET AL.	
	<b>Examiner</b> LANNY UNG	<b>Art Unit</b> 2191	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>May 21, 2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to application filed on August 20, 2006.

**Claims 1-15** are pending.

#### ***Claim Objections***

**Claims 1-2, 4, 6, 9-10 and 13-14** objected to because of the following informalities:

- **Claims 1-2, 4, 6, 9-10 and 13-14** contain the language “the or each content resource”. This claim language is confusing. It is recommended that this language be changed to "one or more content resources" to stay consistent.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 8 and 12** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claims 8 and 12** are directed to a data container. However, the recited components of the data container are software, which is none of a “process, machine, manufacture, or composition of matter” and thus non-statutory under § 101. Therefore,

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these claim limitations are construed as a computer program *per se*. The claims are directed to functional descriptive material *per se*, and hence non-statutory.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Edward Bailey** ("Maximum RPM – Taking the RPM Package Manager to the Limit", 2000) in view of **Yeung et al.** (US 7,496,645) and in further view of **Marjan Hericko et al.** ("Object Serialization Analysis and Comparison in Java and .NET", 2003).

With respect to **Claim 1**, **Edward Bailey** discloses:

- a) creating a container, (*creating a package file, Page 21, lines 11-13*) the container comprising: executable code; (*packages contain programs, Page 21, line 14*) one or more content resources for use in the user interface; (*packages contain documentation, data and configuration information files, Page 21, line 15*) and metadata relating to the or each content resource, (*every package contains information about every file contained in the package, Page 27, lines 33-37*)
- b) transmitting the container to one or more devices; (*obtain the package from an FTP site and stored on a system, Page 32, lines 15-16*)

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c) extracting the contents of the container at the or each device; and *(unpacking files from the package and putting them in the proper places in the system, Page 31, lines 7-11)*

d) executing the code to generate a user interface for the device. *(performing the installation of the software, Page 31, lines 19-33)*

Edward Bailey does not disclose:

executable code for a user interface

the executable code, the or each content resource and the metadata being stored as serialised objects within the container;

However, Yeung et al. disclose:

executable code for a user interface *(software can include high level graphical user interface code, Column 1, lines 40-41)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yeung et al. into the teaching of Edward Bailey to include software that contains high level graphical user interface code in order to install a graphical user interface onto a system using a package/container.

Edward Bailey and Yeung et al. do not disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the container;

However, Marjan Hericko et al. disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the container; (*objects serialization, Page 44, 1. Introduction, Paragraph 1, lines 1-6*)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Marjan Hericko et al. into the teaching of Edward Bailey and Yeung et al. to include storing the executable code, the content resources and the metadata as serialized objects within the contain in order to allow for marshaling objects by value and sending them across process and computer boundaries. (*Marjan Hericko et al., Page 44, 1. Introduction, Paragraph 1, lines 5-6*)

With respect to **Claim 2**, all the limitations of **Claim 1** have been addressed above; and Edward Bailey further discloses:

wherein the metadata comprise data determining access to the executable code and/or the or each content resource to prevent unauthorised access to the executable code and/or the or each content resource during step (a). (*every file in the package contains a file's permissions which specify permitted access, Page 87, lines 15-16*)

With respect to **Claim 3**, all the limitations of **Claim 1** have been addressed above; and Edward Bailey further discloses:

wherein if during step a) the executable code and/or a content resource is altered, the metadata is updated accordingly. (*the MD5 checksum of a file will change if*

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*there is any change to the file's contents, Page 54 and 55, lines 46-48 and 1-2 respectively)*

With respect to **Claim 4**, all the limitations of **Claim 1** have been addressed above; and Edward Bailey further discloses:

the metadata relating to the or each content resources relates to one or more hierarchical classifications, the hierarchical classification(s) relating to the capabilities of a device. *(every file contained in the package includes information about the file size, Page 87, lines 31-33)*

With respect to **Claim 5**, all the limitations of **Claim 1** have been addressed above; and Marjan Hericko et al. further discloses:

further comprising the step of e) processing the container contents into a format for transmission to a device, step e) being performed subsequent 5 to step a) and prior to step b). *(the process of writing the state of an object to a stream, object serialization, to allow for sending the object across process and computer boundaries, Page 44, 1. Introduction, Paragraph 1, lines 1-6)*

With respect to **Claim 6**, Edward Bailey discloses:

storage means to receive a data container; *(disk drive, Page 20, lines 14-15)*

editing means to enable the data container to be edited, *(creating a package file, Page 21, lines 11-13)* in use the data container comprising executable code; *(packages*

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*contain programs, Page 21, line 14) one or more content resources for use in the user interface; (packages contain documentation, data and configuration information files, Page 21, line 15) and metadata relating to the or each content resource, (every package contains information about every file contained in the package, Page 27, lines 33-37)*

and transmission means for transmitting a data container to one or more devices.  
*(obtain the package from an FTP site and stored on a system, Page 32, lines 15-16)*

Edward Bailey does not disclose:

the data container comprising executable code for a user interface  
the executable code, the or each content resource and the metadata being  
stored as serialised objects within the data container;

However, Yeung et al. disclose:

the data container comprising executable code for a user interface *(software can include high level graphical user interface code, Column 1, lines 40-41)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yeung et al. into the teaching of Edward Bailey to include software that contains high level graphical user interface code in order to install a graphical user interface onto a system using a package/container.

Edward Bailey and Yeung et al. do not disclose:

the executable code, the or each content resource and the metadata being  
stored as serialised objects within the data container;



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However, Marjan Hericko et al. disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the data container; (*objects serialization, Page 44, 1. Introduction, Paragraph 1, lines 1-6*)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Marjan Hericko et al. into the teaching of Edward Bailey and Yeung et al. to include storing the executable code, the content resources and the metadata as serialized objects within the contain in order to allow for marshaling objects by value and sending them across process and computer boundaries. (*Marjan Hericko et al., Page 44, 1. Introduction, Paragraph 1, lines 5-6*)

With respect to **Claim 7**, all the limitations of **Claim 6** have been addressed above; and Marjan Hericko et al. further discloses:

wherein the server further comprises a processing means configure, in use, to process a data container prior to transmission of a data container to one or more devices. (*the process of writing the state of an object to a stream, object serialization, to allow for sending the object across process and computer boundaries, Page 44, 1. Introduction, Paragraph 1, lines 1-6*)

**Claim 8** is a data container claim corresponding to the method claims above (Claims 1-5) and, therefore, is rejected for the same reasons set forth in the rejections of Claims 1-5.

With respect to **Claim 9**, Edward Bailey discloses:

a) receiving at a device a container over a communications network, *(obtain the package from an FTP site and stored on a system, Page 32, lines 15-16)* the container comprising: executable code; *(packages contain programs, Page 21, line 14)* one or more content resources for use in the user interface; *(packages contain documentation, data and configuration information files, Page 21, line 15)* and metadata relating to the or each content resource, *(every package contains information about every file contained in the package, Page 27, lines 33-37)*

b) extracting the contents of the container at the device; and *(unpacking files from the package and putting them in the proper places in the system, Page 31, lines 7-11)*

c) executing the code to generate a user interface for the device. *(performing the installation of the software, Page 31, lines 19-33)*

Edward Bailey does not disclose:

executable code for a user interface

the executable code, the or each content resource and the metadata being stored as serialised objects within the container;

However, Yeung et al. disclose:

executable code for a user interface *(software can include high level graphical user interface code, Column 1, lines 40-41)*

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yeung et al. into the teaching of Edward Bailey to include software that contains high level graphical user interface code in order to install a graphical user interface onto a system using a package/container.

Edward Bailey and Yeung et al. do not disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the container;

However, Marjan Hericko et al. disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the container; (*objects serialization, Page 44, 1. Introduction, Paragraph 1, lines 1-6*)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Marjan Hericko et al. into the teaching of Edward Bailey and Yeung et al. to include storing the executable code, the content resources and the metadata as serialized objects within the contain in order to allow for marshaling objects by value and sending them across process and computer boundaries. (*Marjan Hericko et al., Page 44, 1. Introduction, Paragraph 1, lines 5-6*)

With respect to **Claim 10**, all the limitations of **Claim 9** have been addressed above; and Edward Bailey further discloses:

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wherein the metadata comprises data determining access to the executable code and/or the or each content resource to control access to the executable code and/or the or each content resource during step (b). *(every file in the package contains a file's permissions which specify permitted access, Page 87, lines 15-16)*

With respect to **Claim 11**, all the limitations of **Claim 10** have been addressed above; and Edward Bailey further discloses:

wherein the access- determining metadata can be updated in response to receiving a control message from the communications network. *(the MD5 checksum of a file will change if there is any change to the file's contents, Page 54 and 55, lines 46-48 and 1-2 respectively)*

**Claim 12** is a data container claim corresponding to the method claims above (Claims 9-11) and, therefore, is rejected for the same reasons set forth in the rejections of Claims 9-11.

With respect to **Claim 13**, Edward Bailey discloses:

receive a data container from a communications network via the communications interface; *(obtain the package from an FTP site and stored on a system, Page 32, lines 15-16)*

store the data container in the storage means; *(mass storage device, i.e. disk drive, Page 20, lines 11-12)*

process the data container using the processing means to extract the contents of the data container, *(unpacking files from the package and putting them in the proper places in the system, Page 31, lines 7-11)* the data container comprising executable code; *(packages contain programs, Page 21, line 14)* one or more content resources for use in the user interface; *(packages contain documentation, data and configuration information files, Page 21, line 15)* and metadata relating to the or each content resource, *(every package contains information about every file contained in the package, Page 27, lines 33-37)*

Edward Bailey does not disclose:

executable code for a user interface

form a user interface in accordance with the extracted contents of the data container;

and display the user interface in the device display.

However, Yeung et al. disclose:

executable code for a user interface *(software can include high level graphical user interface code, Column 1, lines 40-41)*

form a user interface in accordance with the extracted contents of the data container; *(inherent the high level graphical user interface code when executed produces the user interface, Column 1, lines 40-41)*

and display the user interface in the device display. *(inherent the user interface code is displayed on a display device, Column 1, lines 40-42)*

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yeung et al. into the teaching of Edward Bailey to include software that contains high level graphical user interface code in order to install a graphical user interface onto a system using a package/container.

Edward Bailey and Yeung et al. do not disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the data container;

However, Marjan Hericko et al. disclose:

the executable code, the or each content resource and the metadata being stored as serialised objects within the data container; (*objects serialization, Page 44, 1. Introduction, Paragraph 1, lines 1-6*)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Marjan Hericko et al. into the teaching of Edward Bailey and Yeung et al. to include storing the executable code, the content resources and the metadata as serialized objects within the contain in order to allow for marshaling objects by value and sending them across process and computer boundaries. (*Marjan Hericko et al., Page 44, 1. Introduction, Paragraph 1, lines 5-6*)

With respect to **Claim 14**, all the limitations of **Claim 13** have been addressed above; and Edward Bailey further discloses:

wherein the metadata stored in the storage means comprises data determining access to the executable code and/or the or each content resource to control access to the executable code and/or the or each content resource. *(every file in the package contains a file's permissions which specify permitted access, Page 87, lines 15-16)*

With respect to **Claim 15**, all the limitations of **Claim 14** have been addressed above; and Edward Bailey further discloses:

wherein the device is further configure, in use, to receive control commands from the communications network via the communications interface, the control commands updating the metadata that determines access to the code and/or content resource(s). *(the MD5 checksum of a file will change if there is any change to the file's contents, Page 54 and 55, lines 46-48 and 1-2 respectively)*

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LANNY UNG whose telephone number is (571)270-7708. The examiner can normally be reached on Monday-Thursday, 6:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on (571)272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LU/  
Lanny Ung  
Examiner, Art Unit 2191  
January 10, 2011

/Wei Y Zhen/  
Supervisory Patent Examiner, Art Unit 2191